	Input I (LSBs,:	Pattern 2 bits)	1	All Frames (Carry)					
00	00	00	00	0	0	0	0		
00	00	00	00	0	0	0	0		
01	01	01	01	0	1	0	1		
01	01	01	01	0	0	0	0		
10	10	10	10	0	1	0	1		
10	10	10	10	1	0	1	0		
11	11	11	11	1	0	1	0		
11	11	11	11	1	1	1	1		

FIG. 1 (PRIOR ART)

Inp Patt (LSE 2 b	tern	1st 2nd Frame Frame (Carry) (Carry)		3ı Frai (Ca		4th Frame (Carry)			
00	00	0	0	0	0	0	0	0	0
00	00	0	0	0	0	0	0	0	0
01	01	1	0	0	1	0	0	0	0
01	01	0	0	0	0	0	1	1	0
10	10	1	0	0	1	1	0	0	1
10	10	0	1	1	0	0	1	1	0
11	11	0	1	1	0	1	1	1	1
11	11	1	1	1	1	1	0	0	1

FIG. 2A (PRIOR ART)

Patt (LSE	Input Pattern (LSBs, 2 bits)		1st Frame (Carry)		2nd Frame (Carry)		3rd Frame (Carry)		4th Frame (Carry)	
00	00	0	0	0	0	0	0	0	0	
00	00	0	0	0	0	0	0	0	0	
01	01	1	0	0	0	0	0	0	1	
01	01	0	0	0	1	1	0	0	0	
10	10	1	0	0	1	1	0	0	1	
10	10	0	1	1	0	0	1	1	0	
11	11	0	1	1	1	1	1	1	0	
11	11	1	1	1	0	0	1	1	1	

FIG. 2B (PRIOR ART)

Inp Patt (LSE 2 b	tern	rn Frame Frame s, (Carry) (Carry)		me	3rd Frame (Carry)		4th Frame (Carry)		
00	00	0	0	0	0	0	0	0	0
00	00	0	0	0	0	0	0	0	0
01	01	1	0	0	0	0	1	0	0
01	01	0	0	1	0	0	0	0	1
10	10	1	0	0	1	1	0	0	1
10	10	0	1	1	0	0	1	1	0
11	11	0	1	1	1	1	0	1	1
11	11	1	1	0	1	1	1	1	0

FIG. 2C (PRIOR ART)

	Γ	1	1	Γ	1	<u> </u>	ı	
<u></u>	<u></u>	10	10	01	01	00	00	
<u></u>	<u></u>	10	10	01	01	00	00	put F SBs,2
<u></u>	<u></u>	10	10	01	01	00	00	Input Pattern (LSBs,2 bits)
<u></u>	<u></u>	10	10	01	01	00	00) 'A
	0		0	0		0	0	
			0	0	0	0	0	1st Frame (Carry)
0			0		0	0	0	t Frame (Carry)
			0	0	0	0	0	
		0		0	0	0	0	
0	<u></u>	0			0	0	0	2nd Frame (Carry)
		0	_ <u>`</u>	0	0	0	0	d Frame (Carry)
	0	0		0		0	0	
0			0		0	0	0	
	<u> </u>		0	0	0	0	0	3rd Frame (Carry)
	0		0	0		0	0	d Frame (Carry)
		_ <u>`</u>	0	0	0	0	0	
		0	<u> </u>	0	0	0	0	
	0	0	<u> </u>	0		0	0	4th F (C
		0		0	0	0	0	n Frame (Carry)
0		0			0	0	0	· -

FIG. 3A

				1			·	
1	11	10	10	01	01	00	00	
1	11	10	10	01	01	00	00	put f
11	1	10	10	01	01	00	00	Input Pattern (LSBs,2 bits)
	1	10	10	01	01	00	00	<u>s</u>) 'n
	0		0	0		0	0	
			0	0	0	0	0	1st Frame (Carry)
0	<u></u>		0		0	0	0	t Frame (Carry)
	<u></u>	<u> </u>	0	0	0	0	0	
	<u></u>	0	<u></u>	0	0	0	0	
	0	0	<u></u>	0		0	0	2nd Frame (Carry)
		0		0	0	0	0	d Frame (Carry)
0		0	_		0	0	0	
0			0		0	0	0	
		<u></u>	0	0	0	0	0	3rd Frame (Carry)
	0	<u></u>	0	0		0	0	ame rry)
			0	0	0	0	0	
	<u></u>	0	<u></u>	0	0	0	0	
	0	0		<u></u>	0	0	0	4th Fram (Carry)
		0		0	0	0	0	Frame (Carry)
<u></u>	0	0	<u></u>	0	_	0	0	

FIG. 3B